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TITLE: SURFACE ACOUSTIC WAVE RESONATOR ELEMENT, SURFACE ACOUSTIC WAVE RESONATOR, SURFACE-MOUNT SURFACE ACOUSTIC WAVE RESONATOR, AND METHOD OF MANUFACTURE THEREOF

PUBN-DATE: September 8, 1995

INVENTOR-INFORMATION:

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ABSTRACT:

A surface acoustic wave resonator having an extremely stable resonance frequency, a low equivalent series resistance and a high Q value can be accomplished by using a cantilevered resonator element that comprises an IDT and a reflector arranged on a piezoelectric body. Further, the Q value can be improved by enclosing this SAW resonator in a vacuum housing. The electrodes constituting the IDT are anodized to form thick oxide, which prevents them from short-circuiting due to foreign particles without deteriorating the characteristics. Such a SAW device, attached to a lead frame,

may be molded  
with resin to provide a low-cost, surface-mount SAW device of  
high reliability  
and quality.

DERWENT-ACC-NO: 1995-320735  
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TITLE: Surface-mount surface acoustic wave resonator and method  
of mfr. - has  
cantilevered element with anodized IIT electrodes and  
lattice-type reflectors  
on piezoelectric chip body

INVENTOR: IGUCHI, S; KITAMURA, F ; OGISO, H

PATENT-ASSIGNEE: SEIKO EPSON CORP[SHIH]

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PATENT-FAMILY:

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PAGES	MAIN-IPC		
JP 1133 882 A	November 30, 1999	N/A	014
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JP 07522817 X	June 25, 1996	N/A	000
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US 5867074 A	February 2, 1999	N/A	000
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01211014 ; JP  
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62036704 ; JP  
87023095 ; JP 91011688 ; WO 8806818

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JP 1133 0832A	Div ex	1993JP-0522817
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JP 1133 0832A	N/A	1999JP-0099030
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JP 07522817X	N/A	1995WO-JP00311
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ABSTRACTED-PUB-NO: US 5867074A

BASIC-ABSTRACT: The SAW resonator comprises a cantilevered resonator element (1) which may be vacuum housed with in a metal case (21). The element consists of an IDT (5) and lattice reflectors (6a,b) formed on a piezoelectric chip body (2). The connecting land areas of the elements's IDT electrodes are connected to leads (25a,b) held in a hermetic terminal (22) having a glass core (23) within a metal cylinder (24).

The device may be moulded with resin, and the IDT electrodes are anodized to form a thick oxide.

ADVANTAGE - Low cost and reliable SAW resonator having stable frequency, low equivalent series resistance, and high Q value. Short circuit of IDT electrodes is prevented by anodisation.

ABSTRACTED-PUB-NO: WO 9524075A

EQUIVALENT-ABSTRACTS: The SAW resonator comprises a cantilevered resonator element (1) which may be vacuum housed with in a metal case (21). The element consists of an IDT (5) and lattice reflectors (6a,b) formed on a piezoelectric chip body (2). The connecting land areas of the elements's IDT electrodes are connected to leads (25a,b) held in a hermetic terminal (22)

having a glass core  
(23) within a metal cylinder 24 .

The device may be moulded with resin, and the IDT electrodes are anodized to form a thick oxide.

ADVANTAGE - Low cost and reliable SAW resonator having stable frequency, low equivalent series resistance, and high Q value. Short circuit of IDT electrodes is prevented by anodisation.

CHOSEN-DRAWING: Dwg.5/29

TITLE-TERMS:  
SURFACE MOUNT SURFACE ACOUSTIC WAVE RESONANCE METHOD MANUFACTURE  
CANTILEVER  
ELEMENT IDT ELECTRODE LATTICE TYPE REFLECT PIEZOELECTRIC CHIP  
BODY

DERWENT-CLASS: U14 V06

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